

Walter Reed Cardiovascular Center



A Monthly Newsletter of the Cardiology Division of Walter Reed Army Medical Center

Commentary

Marina N. Vernalis, DO FACC

Walter Reed Cardiology is happy to have Bill Dixon safely back from his year-long deployment in Iraq.

We are in the process of incorporating Woodbridge into our Outreach Clinics (presently, we see new referrals every other week at Ft Meade and at Fairfax). We anticipate an every other week clinic beginning this summer.

As a reminder, any and all patients will be accommodated here. **Just call 202-782-3832/3833 and ask to speak with the "E-DOC" or page 202-356-1111 x107-3311.** We remain available for e-mail, phone or page consultations for all of our primary care providers throughout the NCA/NARMC. Utilize the provided contact information for patient diagnostic or treatment questions.

Check out our updated website www.wramc.amedd.army.mil
Go to Clinical Departments → Medicine → Cardiology.

Cardiovascular Update

Daniel E. Simpson, MD FACC

*Use of B-Type Natriuretic Peptide in the Evaluation and Management of Acute Dyspnea**

Background: Congestive heart failure is the most common cause of hospitalization for patients over 65. Misclassification of acute dyspnea results in under and over diagnosis of CHF which can result in inappropriate therapy and excess costs. Patients with CHF have higher levels of B-Type Natriuretic Peptide (BNP) than patients with other etiologies for acute dyspnea.

Methods: Prospective, randomized, controlled study of 452 patients presenting to an ER with acute dyspnea. Half were assigned to a diagnostic strategy incorporating a bedside assay of BNP and half to standard diagnostic evaluation. Time to discharge and cost were the primary endpoints.

Results: The groups were well matched. Assessment of BNP levels reduced the need for hospitalization (75% v 85% hospitalized, $P = 0.008$) and reduced the need for ICU care (15% v 24%, $P = 0.01$). Time to discharge was 8.0 days v 11.0 days ($P =$

0.001) and cost was \$5,410 v \$7,264 ($P = 0.006$). Mortality rates at 30 days were not different (10% v 12%, $P = 0.45$)

Conclusion: Along with standard clinical assessment of acute dyspnea, rapid assessment of BNP in the ER improves evaluation and treatment with reduced resource utilization.

Comments: The availability of a rapid assay for BNP can aid clinical assessment of acute dyspnea. Standard use of BNP in all patients with dyspnea in the ER cannot yet be advocated.

*N Engl J Med 2004;350:647-54.

www.nejm.org

Guideline Review

Daniel E. Simpson, MD FACC

*Indications for Echocardiography in Valvular Stenosis**

Class I

- Diagnosis; assessment of hemodynamic severity
- Assessment of left ventricular and right ventricular size, function and/or hemodynamics
- Reevaluation of patients with known valvular stenosis with changing symptoms
- Assessment of changes in hemodynamic severity and ventricular compensation in patients with known valvular stenosis during pregnancy
- Reevaluation of asymptomatic patients with severe stenosis

Class IIa

- Assessment of the hemodynamic significance of mild to moderate valvular stenosis by stress Doppler echocardiography
- Reevaluation of patients with mild to moderate aortic stenosis with LV dysfunction or hypertrophy even without clinical symptoms

Class IIb

- Reevaluation of patients with mild to moderate aortic valvular stenosis with stable signs and symptoms

Class III

- Routine reevaluation of asymptomatic adult patients with mild aortic stenosis having stable physical signs and normal LV

size and function

- Routine reevaluation of asymptomatic patients with mild to moderate mitral stenosis and stable physical signs

Class I – General agreement that procedure/treatment is useful & effective

Class II – Conflicting evidence and/or divergence of opinion

Class III – Not useful/effective and in some cases may be harmful

*ACC/AHA Guidelines for the Clinical Application of Echocardiography

www.acc.org/clinical/statements.htm

Cardiovascular Trials at WRAMC

CARDIASTAR

PFO closure device versus standard anti-coagulation therapy with coumadin in patients with an embolic TIA/CVA and no other etiology

Questions/Referrals: Please contact Daniel Simpson

OPTIMIZE-HF

Assessment of inpatients with CHF and/or LV dysfunction to determine if guideline treatment is appropriately implemented

Questions/Referrals: Please contact Stephen Welka

WARCEF

Randomized, double-blind comparison of coumadin versus aspirin for the reduction of death and stroke in heart failure patients (EF < 30% and in sinus rhythm)

Questions/Referrals: Please contact Stephen Welka

RESCUE

Randomized, open label comparison of unfractionated heparin versus low molecular weight heparin in the treatment of high-risk non-ST elevation acute coronary syndromes

Questions/Referrals: Please contact Daniel Simpson